27/27

Composite of a Vulcanizable Rubber Composition and Cured Rubber Product

Abstract of the Disclosure:

- In a composite of vulcanizable rubber or rubber-like composition with one or more metal reinforcement elements embedded therein, the metal reinforcement element is coated with a polymer or non-cured rubber composition compatible with and co-polymerizable, co-vulcanizable or crosslinkable with said vulcanizable ruber composition to be reinforced, and additionally bearing functional groups either covalently bonding to the metal surface of said reinforcement element or forming covalent bonds with the outward directed first functional groups of a mono- or multimolecular layer of a bifunctional adhesion promoter intercalated between said metal and said coating and bound to said metal by its second functional groups. A cured rubber or rubber-like product, for
- instance a pneumatic tire, is obtained by vulcanization of such a composite.